

REMARKS

Applicant's claims have been amended to better clarify Applicants' claimed invention. Independent claims 1, 10, and 19, are amended to recite an accessor comprising a vertical pillar, a lifting servo section moveably disposed on said vertical pillar, two robotic manipulators disposed on said lifting servo section, and a scanner disposed on said lifting servo section. The written description and FIGs. refer to accessor 18 disposed in Applicants' information storage system. See, written description at page 4 / lines 13-14; page 4 / line 14; page 4 / line 19; page 6 / line 14, and FIG. 1.

The written description expressly incorporates by reference United States Patent No. 5,914,919 regarding the construction and operation of accessor 18. In addition, FIG. 2 of the '919 patent is expressly referenced. "U.S. Pat. No. 5,914,919 describes the construction and operation of accessors such as accessor 18, and is hereby incorporated by reference. FIG. 2 of the '919 patent shows a set of parallel rails as numeral 22." Specification at Page 4 / Lines 18 - 21. The '919 patent describes accessors as follows:

The accessors 16 and 17 are illustrated in greater detail in FIG. 2. The accessors run on the rails 22 along the library aisle by motors 30 in running servo sections 31. A pillar 32 is vertically attached to each of the running sections 31 of the accessors and rides in top rail 34 to provide vertical stability. Robotic manipulators 36 are mounted on lifting servo sections 35 which can move vertically along the pillars 32.

In the embodiment illustrated in FIG. 2, each of robotic manipulators 36 includes as components, two grippers 37 and 38 and a scanner 39.

United States Pat. No. 5,914,919 at page 3 / lines 14 - 25.

No new matter has been entered. Reexamination and reconsideration of the application, as amended, is respectfully requested.

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The drawings stand objected to under 37 CFR 1.83(a) for failing to show every feature of the invention specified in the claims. The claims have been amended to recite a first media library having a rail system, and optionally a second media library having a rail system, one or more accessors, and a garage disposed adjacent the first media library, and optionally adjacent the second media library, where that garage includes a moveable rail system. A top view of the first media library having a rail system is shown in FIGs. 1, 3, 4, and 9a through 9f. A top view of a second media library having a rail system is shown in FIGs. 3, 4, and 9a through 9f. A top view of Applicants' accessor is shown in FIGs. 1, 3, 4, and 9a through 95. A perspective view of Applicants' accessor is shown in FIG. 1 United States Patent 5,914,919 which is expressly incorporated into the Applicants' written description. A side view of Applicants' accessor is shown in FIG. 2 of the '919 patent.

A top view of Applicants' moveable rail system is shown in FIGs. 1, 3, 4, and 9a through 9f. A perspective view of Applicants' moveable rail system is shown in FIGs. 7 and 8. An end view of Applicants' moveable rail assembly is shown in FIG. 2. Applicants' respectfully submit that the FIGs. show every feature of the invention recited in the claims, as amended herein.

Claims 1 - 22 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Ostwald (U.S. Pat. No. 6,262,863) in view of Kanetsuku et al. (U.S. Pat. No. 6,449,223).

Ostwald teaches a "library comprising a two dimensional array that contains media cartridge cells and media cartridge players. A system of rails is used to guide robotic pods through all of the locations in the array." Col. 2 / Lines 60 - 64. Ostwald nowhere teaches a library which includes an accessor comprising a vertical pillar, a lifting servo section moveably

disposed on said vertical pillar, two robotic manipulators disposed on said lifting servo section, and a scanner disposed on said lifting servo section.

Quite to the contrary, Ostwald actually teaches away from Applicants' invention. "A reference may be said to teach away when a person of ordinary skill, upon reading the reference . . . would be led in a direction divergent from the path that was taken by the applicant." *In re Gurley*, 27 F.3d 551, 553 (Fed.Cir. 1994). Ostwald teaches away from accessors which include a lifting servo section as recited in Applicants' claims. In Col. 2 between lines 6 and 36 Ostwald teaches alleged problems inherent in using a moveable "robotic arm" such as the vertical pillar / lifting servo section components of Applicants' assessor. For example, Ostwald complains that "[t]he typical robotic arm and its supporting structure requires several servo motors to move the robotic arm between positions." Col. 2 / Lines 22 - 24. Ostwald further complains that "each move of the robotic arm requires a time interval after the mechanism has stopped to bring the servo position into a steady state." Col. 2 / Line 24 - 26. Further, Ostwald teaches "[t]he moving mass of the robotic arm is much greater than the media cartridge being moved . . . The moving mass of the robotic arm also relates directly to power consumption, which is an important factor in large installations." Col. 2 / Lines 29-31 and 34 - 36.

In order to eliminate a servo mechanism to move the accessor's gripper mechanism upwardly and downwardly, Ostwald teaches a library wherein "[a] system of rails is used to guide robotic pods through all of the locations in the array . . ." Col. 2 / Lines 63 - 64. Ostwald's FIG. 1 shows this "system of rails" wherein the horizontal rails 122 - 126 guide Ostwald's pods 102 horizontally. The moveable vertical rail system 132 moves the pods upwardly and downwardly. Thus, Ostwald teaches a storage library wherein the entire

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accessor, rather than only one or more gripper mechanisms, is moved to each storage location and data drive.

One of ordinary skill in the art following the teachings of Oswald would be motivated to construct a storage library comprising a rail system in combination with one or more accessors, such that each accessor can be positioned immediately in front of each storage slot and storage drive. That person of ordinary skill in the art, however, would not be motivated to construct a storage library comprising a series of moveable rail systems in combination with an accessor comprising two media gripper mechanism and a scanner disposed on a lifting servo section as recited by Applicants' claims as amended herein.

Oswald further teaches away from Applicants' invention. Oswald teaches a robotic pod which includes a picker subassembly or a bar code reader, i.e. a scanner, but not both. "A detailed view of a robotic pod base assembly that is equipped with a picker subassembly is shown in FIG. 2A. . . An alternative embodiment of a robotic pod 102 is shown in FIG. 2B wherein the robotic pod base is used to carry a bar code reader apparatus 211 instead of a media cartridge picker mechanism." Col. 6 / Lines 14 - 26 (emphasis added).

One of ordinary skill in the art following the teachings of Oswald would be motivated to construct a robotic pod which comprises either a picker mechanism or a scanner, but not both. That person of ordinary skill in the art, however, would not be motivated to construct a storage library comprising a series of moveable rail systems in combination with an accessor comprising a lifting servo section which includes two picker mechanisms and a scanner, as recited by Applicants' claims, as amended herein..

Kanetsuku et al. teach a library apparatus comprising "a storage rack, a deck, and an

accessor and is constructed by coupling a plurality of lockers in which a traveling passage for the accessor is formed to penetrate them as well as the first-mentioned library apparatus, wherein sheet metal columns having a standardized structure are set vertically at corner portions of the locks, and a plane reference plate having a vertical surface parallel to the coupling directions of the plurality of lockers . . .” Col. 2 / Line 65 - Col. 3 / Line 4.

Kanetsuku et al., however, nowhere teaches a library which includes an accessor comprising a vertical pillar, a lifting servo section moveably disposed on said vertical pillar, two robotic manipulators disposed on said lifting servo section, and a scanner disposed on said lifting servo section.

“To establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art.” MPEP 2143.03; *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). Applicants’ claim 1, as amended herein, recites a data storage system comprising a moveable rail system in combination with an accessor comprising a vertical pillar, a lifting servo section moveably disposed on that vertical pillar, two robotic manipulators disposed on that lifting servo section, and a scanner disposed on that lifting servo section.

Neither Ostwald nor Kanetsuku et al., singly or in combination, suggest or teach a moveable rail system in combination with an accessor comprising a vertical pillar, a lifting servo section moveably disposed on that vertical pillar, two robotic manipulators disposed on that lifting servo section, and a scanner disposed on that lifting servo section. This being the case, Applicants respectfully submit that the amendment of claim 1 herein successfully traverses the rejection of claim 1 under 35 USC § 103(a) as unpatentable over Ostwald in view

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of Kanetsuku et al.

Claims 2 - 9 depend from claim 1. Under 35 U.S.C. § 112, fourth paragraph, "a claim in dependent form shall be construed to incorporate by reference all the limitations of the claim to which it refers." Therefore, claims 2 - 9, as amended herein, includes all the elements of claim 1, as amended herein. "If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious." MPEP 2143.03; *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed.Cir. 1988).

For the reasons set forth above, Applicants' respectfully submit that claim 1, as amended herein, is patentable over Ostwald in view of Kanetsuku et al. This being the case, Applicants respectfully submit that the amendments of claims 2 - 9 herein successfully traverse the rejections of those claims under 35 U.S.C. § 103(a) as unpatentable over Ostwald in view of Kanetsuku et al.

Applicants' claim 10, as amended herein, recites an data storage system comprising a moveable rail system in combination with an accessor comprising a vertical pillar, a lifting servo section moveably disposed on that vertical pillar, two robotic manipulators disposed on that lifting servo section, and a scanner disposed on that lifting servo section.

Neither Ostwald nor Kanetsuku et al., singly or in combination, suggest or teach a moveable rail system in combination with an accessor comprising a vertical pillar, a lifting servo section moveably disposed on that vertical pillar, two robotic manipulators disposed on that lifting servo section, and a scanner disposed on that lifting servo section. This being the case, Applicants respectfully submit that the amendment of claim 10 herein successfully traverses the rejection of claim 10 under 35 USC § 103(a) as unpatentable over Ostwald in

view of Kanetsuku et al.

Claims 11 - 18 depend, directly or indirectly, from claim 10. Under 35 U.S.C. § 112, fourth paragraph, "a claim in dependent form shall be construed to incorporate by reference all the limitations of the claim to which it refers." Therefore, claims 11 - 18, as amended herein, include all the elements of claim 10, as amended herein. "If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious." MPEP 2143.03; *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed.Cir. 1988).

For the reasons set forth above, Applicants' respectfully submit that claim 10, as amended herein, is patentable over Ostwald in view of Kanetsuku et al. This being the case, Applicants respectfully submit that the amendments of claims 11 - 18 herein successfully traverses the rejections of those claims under 35 U.S.C. § 103(a) as unpatentable over Ostwald in view of Kanetsuku et al.

Applicants' claim 19, as amended herein, recites a method to move an accessor within a data storage system, where that data storage system includes a moveable rail system, and where that accessor comprises a vertical pillar, a lifting servo section moveably disposed on that vertical pillar, two robotic manipulators disposed on that lifting servo section, and a scanner disposed on that lifting servo section.

Neither Ostwald nor Kanetsuku et al., singly or in combination, suggest or teach a moveable rail system in combination with an accessor comprising a vertical pillar, a lifting servo section moveably disposed on that vertical pillar, two robotic manipulators disposed on that lifting servo section, and a scanner disposed on that lifting servo section. This being the case, Applicants respectfully submit that the amendment of claim 19 herein successfully

traverses the rejection of claim 19 under 35 USC § 103(a) as unpatentable over Ostwald in view of Kanetsuku et al.

Claims 20 - 22 depend from claim 19. Under 35 U.S.C. § 112, fourth paragraph, "a claim in dependent form shall be construed to incorporate by reference all the limitations of the claim to which it refers." Therefore, claims 20 - 22, as amended herein, include all the elements of claim 19, as amended herein. "If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious." MPEP 2143.03; *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed.Cir. 1988).

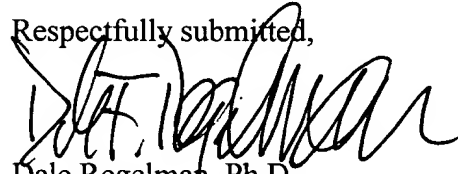
For the reasons set forth above, Applicants' respectfully submit that claim 19, as amended herein, is patentable over Ostwald in view of Kanetsuku et al. This being the case, Applicants respectfully submit that the amendments of claims 20 - 22 herein successfully traverse the rejections of those claims under 35 U.S.C. § 103(a) as unpatentable over Ostwald in view of Kanetsuku et al.

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Having dealt with all of the outstanding objections and/or rejections of the claims, Applicants submit that the application as amended is in condition for allowance, and an allowance at an early date is respectfully solicited. In the event there are any fee deficiencies or additional fees are payable, please charge them, or credit an overpayment, to our Deposit Account No. 502262.

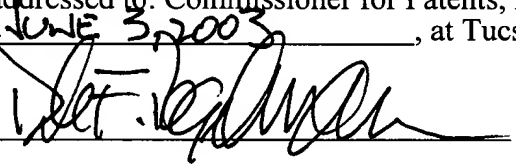
Respectfully submitted,



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